



# Effect of COVID-19 on retail businesses in Nigeria: A survey of selected SMEs

Yohanna Gyang Jugu<sup>1</sup>, Abel Inabo OBAKA<sup>2</sup>

<sup>1</sup>Department of Public Administration, Faculty of Management Sciences, University of Jos, Jos, Nigeria; Email: yjugu@yahoo.com

<sup>2</sup>Department of Economics, Faculty of Social Sciences, National Open University of Nigeria, Abuja, Nigeria

## Article History

Received: 02 September 2020

Reviewed: 04/September/2020 to 10/October/2020

Accepted: 13 October 2020

Prepared: 15 October 2020

Published: November 2020

## Citation

Yohanna Gyang Jugu, Abel Inabo OBAKA. Effect of COVID-19 on retail businesses in Nigeria: A survey of selected SMEs. *Discovery*, 2020, 56(299), 748-765

## Publication License



© The Author(s) 2020. Open Access. This article is licensed under a [Creative Commons Attribution License 4.0 \(CC BY 4.0\)](https://creativecommons.org/licenses/by/4.0/).

## General Note



Article is recommended to print as color digital version in recycled paper.

## ABSTRACT

This study examines the effect of the COVID-19 pandemic lockdown on retail businesses in Nigeria with focus on the small and medium-sized enterprises (SMEs). It employs survey method of research in which 200 questionnaires were administered by hand and online to respondents across the federation. The study adopts descriptive statistics to analyze the perceptions of small scale business retailers on COVID-19 pandemic lockdown, COVID-19 pandemic financial constraints and survival strategies as well as overall rating of government's palliative measures. Our findings revealed that ownership status of the retailing business showed the preference for sole proprietorship amongst small businesses. Majority of the respondents observed partial compliance to the lockdown. By inference, despite enforcement, full lockdown was not obvious. What is obvious is that people mostly observed partial lockdown. Also, the strain on income and saving as a result of the pandemic was the most agreed upon a statement by the SMEs, thus reflecting a generally negative impact of COVID-19 on sales and revenues. However, the results reflect a general resilience amongst the SMEs as implied by their decision to borrow from friends and families, taking goods and supplies from creditors and bank loans in order to continue in their line of business despite the pandemic. The respondents generally disagreed with the government's palliatives measures in which they rated it very poor. By inference, lack of government's palliative lends support to the findings on non-compliance with full lockdown. In addition, irregular supply of electricity was one of the most agreed upon a

statement by the SMEs, thus reflecting a generally negative impact of COVID19 on production activities as businesses had to resort to alternative power supply. Government should, therefore, provide adequate electricity, low-interest loans, relaxation of the loan repayment, and relaxation of taxation payment to enable them to survive the consequence of the pandemic.

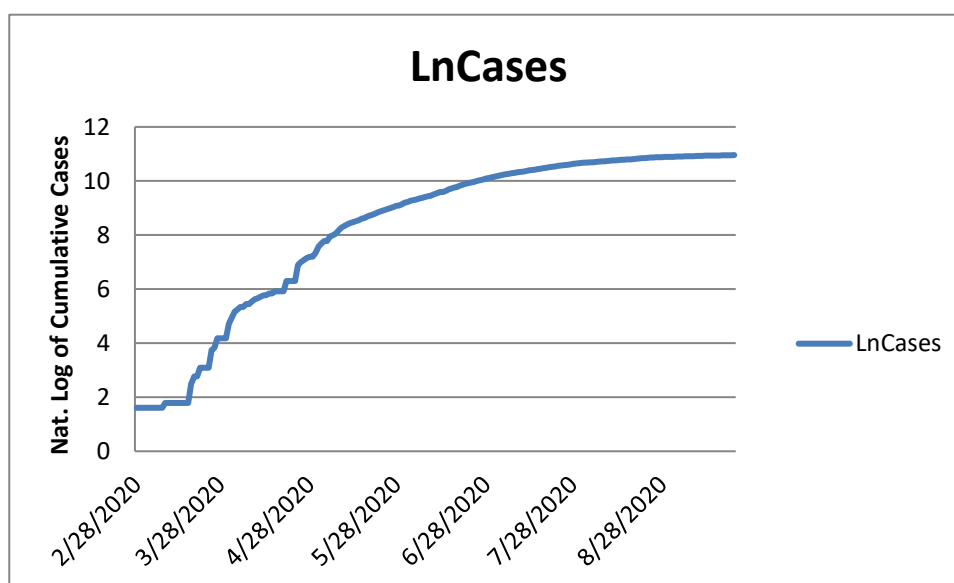
**Keywords:** COVID-19; Pandemic; Economic; Nigeria; Small and Medium Scale Enterprises

## 1. INTRODUCTION

The world is currently witnessing pandemic referred to as COVID-19 (Nicks & Do, 2020) which surfaced in a city known as Wuhan in China in October 2019. Globally, as at twenty-second September, 2020, instances of Covid-19 pandemic have crossed in excess of 31 million alongside the loss of life higher than 900 thousands. Notwithstanding the human effect, there is additionally huge monetary, business and commercial impacts being felt worldwide because of the covid-19 pandemic (IMF, 2020). The growing incidence of COVID-19 pandemic is a threat to the survival of small and medium-sized enterprises (SMEs), especially in the developing countries. Micro and small businesses form the backbone of emerging economies and, according to the International Labor Organization, generate approximately 90% of employment in Sub-Saharan Africa. Furthermore, micro-retail outlets are an essential source of basic goods and services for vulnerable communities and serve as a vital link in food supply chains.

All the countries of the world have been applying wide-running policy apparatuses to control the COVID-19 infection with approaches such as social distancing, lockdown, the suspension of air travel and borders closure (Thunström et al., 2020). In contrast, the economic consequences of such measures are phenomenal. The COVID-19 pandemic brings unprecedented challenges. Demand for many goods and services have fallen dramatically, whilst some manufacturers either have shortages or are overwhelmed. In Nigeria and around the world, borders are being closed and societies have to change the way they live. As entire countries come under quarantine orders and consumers around the world try to reduce human contact, businessmen should know that how they respond to the disease will have a significant effect on their businesses.

Nigeria recorded its first COVID-19 index case, an Italian national on February 27, 2020 and this number reached to 57,613 on September 23, 2020 (National Centre for Disease Control [NCDC], 2020). The number of discharged cases as at that date was 48,836 with 1,100 deaths which represents 1.9 percent fatality rate. Figure: 1 shows the natural log incidence curve of cases from day one to two hundreds and eight days. The graph reveals an upward trajectory. The rate of growth of cases was very high in early days which indicate that the virus has been spreading rapidly and the country was unable to contain it due to lack of information about virus and proper controlling strategies. However, after 104 days the graph indicates a decline in the rate of confirmed cases. From day 105 to 208 it can be observed that the curve has started bending and which means in coming weeks Nigeria may be successful in flatten the curve.



**Figure 1:** Intensity of Covid-19 Pandemic in Nigeria

Source: Authors' Estimation, using WHO data

Despite the fact that the loss of valuable lives is a misfortune yet there is massive financial fallout of this pandemic. Nigeria is faced with economic crisis due to reduced oil prices exports earnings which account for about 90 percent of her foreign exchange earnings. The COVID-19 pandemic has forced lockdown on countries around the world which also in turn sent crude oil prices to a twenty-year old low. Prompted by poorer worldwide demand and reliance on oil exports for budget funding, Nigeria's economy and her fragile currency are being seriously affected. The SMEs that respond by rising up to the occasion would seek innovative ways of dealing with the situation while those who react may struggle with adapting to the changes they need to make to remain profitable and resilient in these times. Nigeria's too much reliance on imports from China exacerbates its susceptibility. In 2019, raw materials constituted 70% of the total imports from China into Nigeria and according to the National Bureau of Statistics (NBS), Asia and Europe contributed 86% of Nigeria's imports in Q4 2019. The restrictions currently imposed on cross border trade have significantly distorted supply chains for manufacturers and we are beginning to see the effect on the Nigerian economy. In Nigeria, states like Lagos and Ogun, which are major production hubs have been shut down by the government to effectively curb the spread of the virus.

Nigeria was among the first nations in Sub-Saharan Africa (SSA) to identify COVID-19 (coronavirus) cases and has since implemented strict measures to contain the spread of the infection. Every one of these measures has proved inadequate to recompense for the economic losses induced by the COVID-19 virus as all the sectors of the Nigerian economy have been tumbling under the massive financial losses. Poverty and unemployment rates are all-time high. Many industrial units have been shut down either because of inaccessibility of inputs or low demand. The small business owners and daily wage earners are on the verge of poverty. With an abrupt shut down of the Nigerian economy due to COVID-19 pandemic, many retailing businesses are faced with urgent needs for fund to meet the unexpected demands arising from the shutdown, especially to meet operational costs. It's against this backdrop that the researchers conducted a survey in order to gauge the impact of COVID-19 on micro-retailers, enable policy makers develop better strategies for supporting the micro-retailers, and spotlight the impact of the disruption on the micro-retail businesses.

Following this introduction, the rest of the paper is organized as follows. Section 2 presents empirical review while section 3 provides methodology with theoretical framework. The focus of section 4 is on results and analysis while the last section concludes the study.

## 2. EMPIRICAL REVIEW

The retail business has been considered as the most important player in the supply chain as it fulfills the customer demand and shares the actual demand data with suppliers for further forecasting (Wilson, 2007; Fleisch & Tellkamp, 2005). Even though retailers are considered an essential stakeholder of supply chain (Salehi, Torabi, Sahebjamnia, 2015), literature related to the epidemic outbreak and retail industry is scarce (Oke & Gopalakrishnan, 2009). The few extant studies show that the last millennium's major historical pandemics have typically been associated with subsequent low returns as assets (Jorda, Singh and Taylor, 2020). Small and medium-sized enterprises (SMEs) have a lack of financial resources as the biggest challenge to short and long-term recovery in the Covid-19 situation (Cumbie, 2017). Oke and Gopalakrishnan (2009) mentioned the epidemic outbreak as an inherent risk of the supply chain that causes the loss of demand and disruption in retail organizations due to the unavailability of products. (Kumar & Chandra, 2010); with a close-loop diagram, explained the transmission of Avian flu among the population, retail staff, and entire supply chain. The study suggested keeping the record of their team and suppliers to inform them about all the essential safety measures that can be applied in the course of performing their duty.

COVID-19, is caused by CoV, is a family of viruses common to humans and animal species, particularly in camels, goats, cats, and bats (CDC, 2020). The first CoV transmission to humans, which was distinct from previously identified human CoV was reported in Asia in 2003, known as SARS-CoV (CDC, 2013). The outbreak of Middle East respiratory syndrome coronavirus (MERS-CoV) in 2012 also witnessed the transmission of CoV into humans (CDC, 2020). In December 2019, the outbreak of respiratory illness was reported in China due to the new virus (SARS-CoV-2) and soon become a serious threat to human existence (Hui et al., 2020). COVID-19 came as a supply and demand shock that impacted the productivity of global supply chain (Baldwin & Tomiura, 2020). Ivanov (2020) analyzed that supply chain performance is directly proportional to the duration of the disruption and illustrated that it depends upon time, disruption propagation scale, and availability of facilities (Linton & Vakil, 2020; Ivanov & Dolgui, 2020) pointed out the importance of supply chain resilience and viability during exceptional events (like the COVID-19 epidemic).

In a survey done on 5800 small businesses (Bartik, Bertrand, Cullen, Glaeser & Luca, 2020), found that 43% of retail outlets are temporarily closed as they are more prone to COVID-19 outbreak. Owing to travel restraint, health isolation program, and manufacturing works shutdown, shops are facing problems in sustaining operational steadiness both offline and online. Bartik, Bertrand, Cullen, Gbeser, Luca and Stanton (2020) conducted a survey of more than 580 SMEs, between March 28 and April 4, 2020.

The result revealed that there were mass layoffs, closure of business, different beliefs about the likely duration of the COVID related disruptions, many businesses are financially on the brink, and most businesses planned to seek funding.

COVID 19 has caused a significant economic shock (Seth, Ganaie, and Zafar 2020), drop in oil prices with naira under severe pressure to dollar current official rate, rising inflation, and significant job losses in Nigeria. In March 2020, the International Labour Organization (ILO) estimated that the impact of COVID-19 would result in a rise in global unemployment of between 5.3m (low scenario) and 24.7m (high scenario) according to ILO (2020). Another impact of COVID-19 is the continuous protection of workers' health and safety and reducing workers' exposure to COVID-19 in the workplace (KPMG, 2020). A distinguishing feature of the pandemic has been the shift from face-to-face to digital connection for education, corporate meetings, health sessions, buying, religious and cultural events (Phillipson, et al. 2020).

Aladejebi (2020) examines the impact and survival strategies for small and medium enterprises (SMEs) in Nigeria during the ongoing COVID-19 crises. They applied a survey research method in which 360 questionnaires were distributed to three hundred and sixty SME owners in Lagos. Exactly 342 of the 360 questionnaires were viable. The participants perceived that the one of effects of COVID-19 pandemic was a decline in revenue as well as reduction in salaries, and government not doing enough to curtail the spread of the pandemic. They also observed that the inability to repay loans, rent, and salaries are significant problems faced by SMEs. The respondents suggested that the government should lower interest rates, relax loan, and tax repayments.

The consequence of Covid-19 on the economy and financial markets in Nigeria are enormous and these are: economic lockdown of major cities (Abuja, Lagos, and Ogun State) on March 30, 2020, leading to economic loss especially for daily income earners from small-medium scale businesses, withdrawal of money by investors from the stock exchange market and fall in oil prices (Ozili, 2020). Some of the impacts of the Covid-19 include disruption of business cash flow, missing important compliance deadlines, employees working from home, and employees working outside their country because of the travel ban, restriction for directors to attend board meetings as a result of the travel ban, disruptions in supply chains (KPMG, 2020). The lockdown of the major cities in Nigeria and the current foreign exchange devaluation due to a drop in crude oil prices arising from the Covid-19 Pandemic has impacted all sectors in Nigeria. The epidemic outbreak has been considered as supply chain disruption risk that can be recurring or irregular and it can be for brief or extended in duration that reduces the size of merchants and upsurges the customer demand by 20 percent overnight (Chopra & Sodhi, 2004). Even though some studies were done on the impact of Covid-19 on retailing business in Nigeria, most of them (Aladejebi, 2020) were concentrated in the metropolitan towns of South West, especially Lagos and Ibadan. Hence, there is need to find out the effect of Covid-19 on retail businesses in Nigeria with focus on small and medium-sized enterprises with substantial attention devoted to the north central zone of Nigeria.

### 3. METHODOLOGY

The survey is to better understand the challenges faced by retail businesses during the COVID-19 crisis and how they are responding to growing economic uncertainties. The survey questions focus on the impacts of COVID-19 on micro-retail enterprises in business operations, taken in response to the pandemic, challenges, and support required in the face of the crisis. Overall, 200 SMEs participants were interviewed in Plateau State (39), Kogi State (89), Bauchi State (10), Kaduna State (8), Lagos State (12), Abia State (12) and Rivers State (8) of Nigeria. Structured questionnaire was administered by hand and online. Data was compiled, coded, cleaned, and analyzed in excel and SPSS statistical package. Means, percentages, frequencies, graphs, and charts were used to help describe the findings illustratively.

#### 3.1 Theoretical model

The authors adopt supply shock and demand shock theories to verify if they are validated or not by the survey. A supply shock is an occurrence that abruptly raises or reduces the supply of a good, product or service. This swift change disturbs the equilibrium price of the good, product or service and the general price level of the entire economy. In the short run, an economy-wide negative supply shock will shift the aggregate supply curve leftward, decreasing the output and increasing the price level (Czech, 2013). In the short run, an economy-wide positive supply shock will shift the aggregate supply curve rightward, increasing output and decreasing the price level (Hall & Lieberman, 2012). A positive supply shock could be due to an advance in technology (a technology shock) which makes production more efficient, thus increasing output.

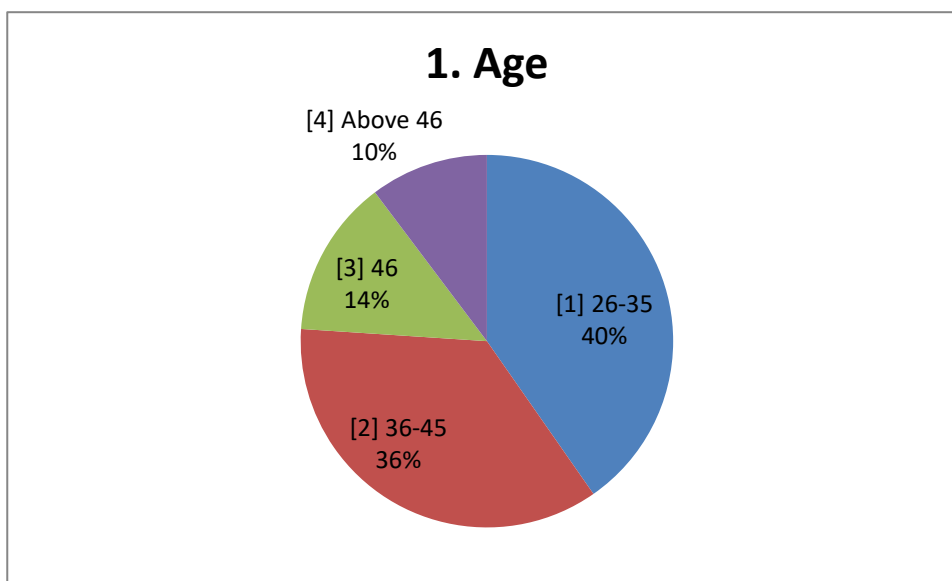
On the other hand, a demand shock is a sudden event that increases or decreases demand for goods or services temporarily. A positive demand shock raises aggregate demand (AD) while a negative demand shock shrinkages aggregate demand. In both cases prices of a commodity or a product and a service are affected. When the demand for good, product or service increases the price level also increases due to a shift in demand curve to the right. On the other hand, when demand decreases, its price also decreases

due to a shift in demand curve to the left. It should be noted that demand shocks can originate from changes in things such as tax rates, money supply, government spending and lockdown such as the covid-19 pandemic.

The justification for the application of these theories for this study is that covid-19 has affected both trade and production chains so it has reduced supply. Covid-19 has also increased unemployment and prices and the induced lockdown limited the movement of people so it has reduced demand for goods and services.

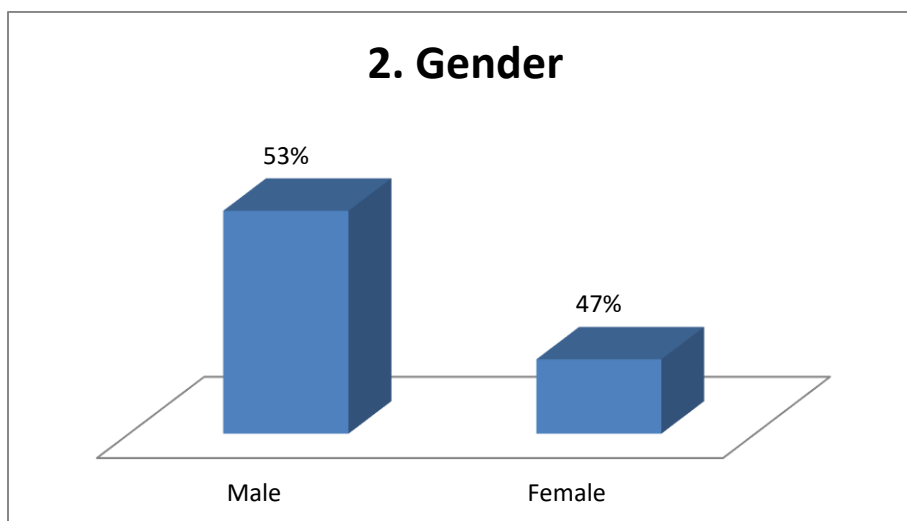
#### 4. RESULT ANALYSIS

Results generated from the instrument are presented in tables 1-5 in appendixes one to five. Table 1 shows the item-by-item percentage analysis of the structured questionnaire on the socio-demographic characteristics of the respondents developed by the researchers. From the table it can be seen that fifty-one respondents (25%) are aged between 26-35 years, followed by eighty-six (43%) respondents aged between 36-45 years. Thirty-six respondents are aged 46 years which represent 18 percent while those above forty years are 14 percent. This is graphically illustrated in the pie-chart in figure 2.



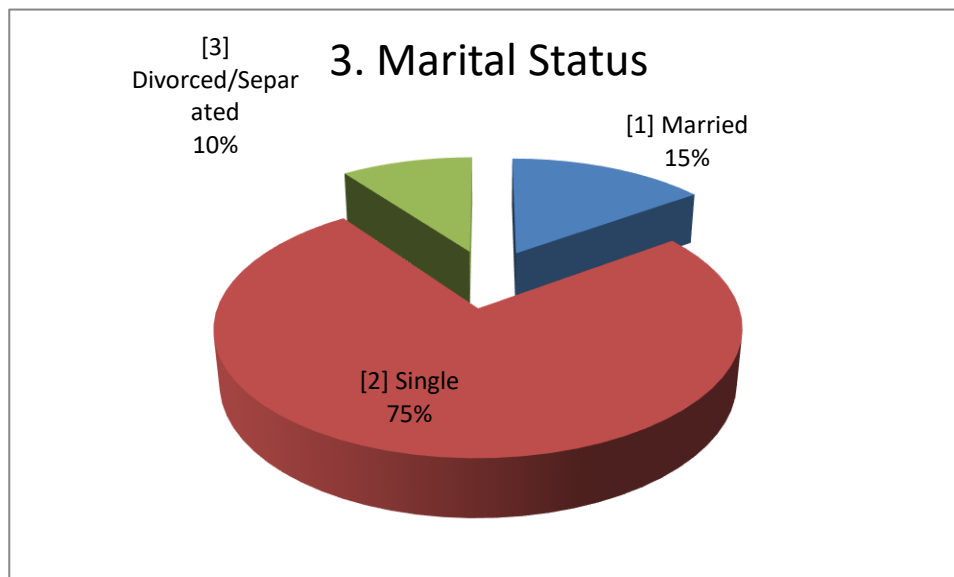
**Figure 2:** Age of Respondents,  
Source: Researchers' Analysis

The gender distribution of the respondents is also graphically illustrated in the Bar-chart in figure 3 which shows that approximately majority of the respondents are male (53%) while females which represent 47 percent are minorities.



**Figure 3:** Gender of Respondents.  
Source: Researchers' Analysis

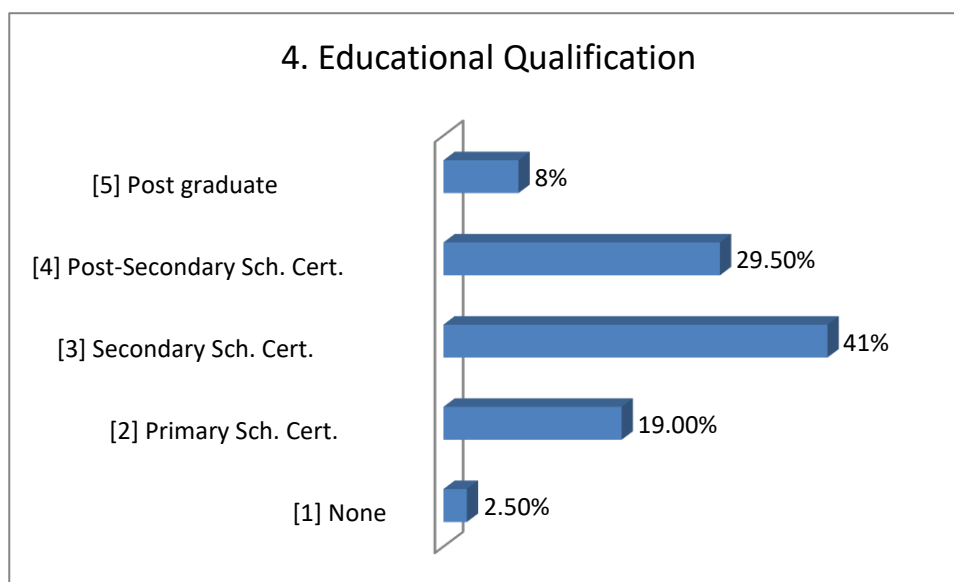
Item number three on table 1 in the appendix 1 is the marital status of the respondents in which thirty respondents representing 15 percent are married, while one hundred and fifty respondents or 75 percent are singles with divorced/separated totaling twenty which represents 10 percent of the responses. This is likewise graphically illustrated in figure 4.



**Figure 4:** Marital Status.

Source: Researchers' Analysis

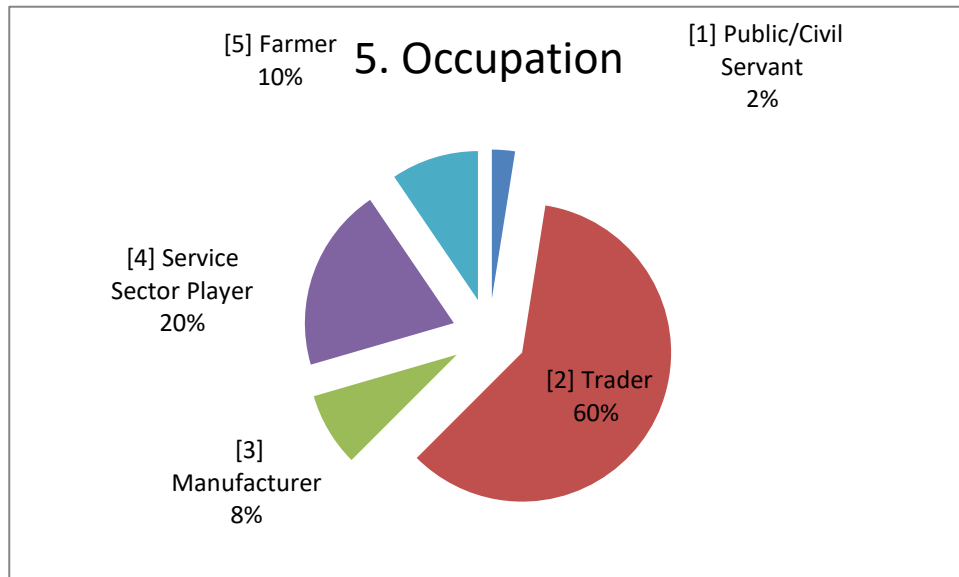
The focus of figure 5 below is the analysis of the qualifications of the respondents which shows that majority of them have secondary school certificate (41%), followed by post-secondary school certificate (29.5%), primary school certificate (19%), post-graduation qualification (8%) and lastly, no certificate (2.5%).



**Figure 5:** Qualification of Respondents.

Source: Researchers' Analysis

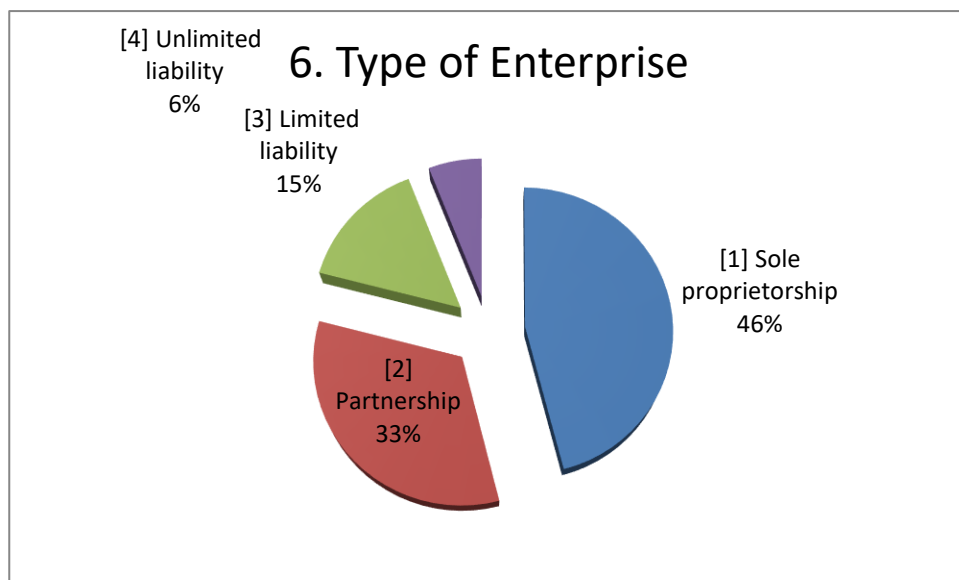
Variable listed on number five in table 1 of appendix 1 is the occupational status of the respondents, and it can be seen that majority are traders which has one hundred and twenty or 60 percent, followed by service provider which has forty persons or 20 percent and 19 farmers (10%). In addition, manufacturers are sixteen in number or 8 percent while public/civil servants take the rear position with five workers representing 2 percent. Figure 6 below graphically illustrate this information on occupational distribution of the respondents.



**Figure 6:** Occupation.

Source: Researchers' Analysis

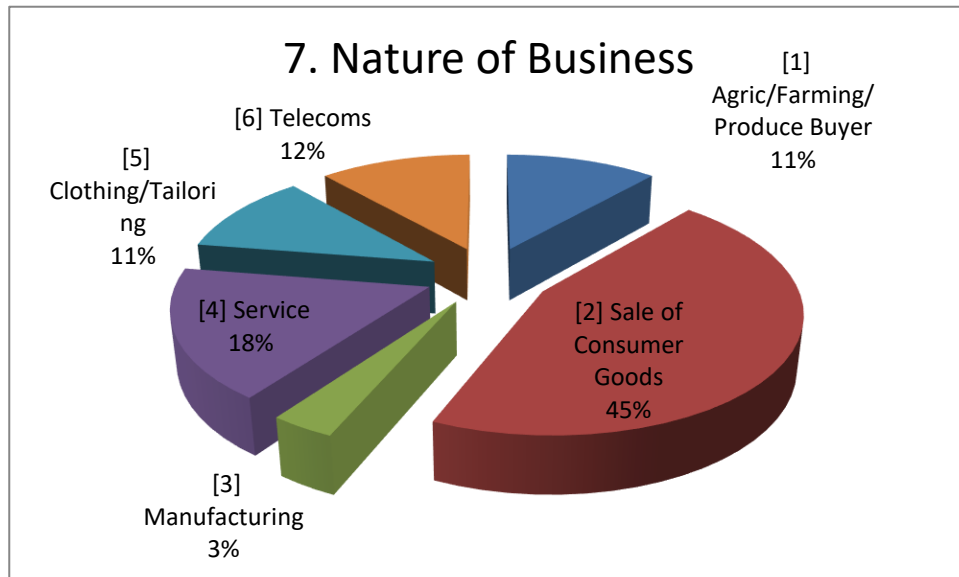
Table 2 in appendix 2 shows the item-by-item percentage analysis of the information of the SMEs. Variable listed on number six is the ownership status of the SMEs, and it can be seen that majority are sole proprietors, with about ninety-two representing 46 percent of the responses. Sixty-six or 33 percent of the respondents are partners while 30 or fifteen percent are limited liability enterprises. The number of unlimited entities is a mere twelve or 6 percent of responses. This is equally depicted in figure 7.



**Figure 7:** Type of Enterprise.

Source: Researchers' Analysis

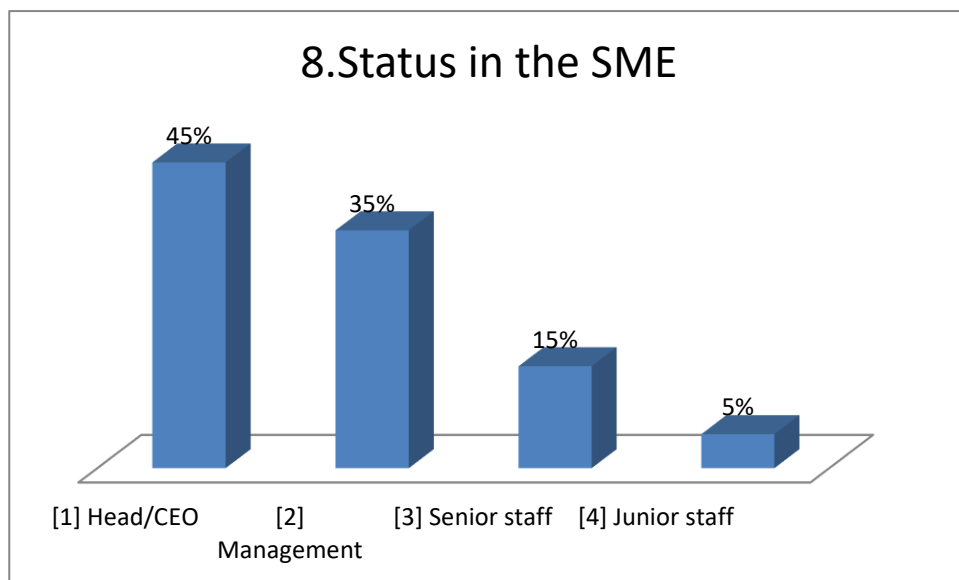
Similarly, item seven on table 2 in appendix 2 is the nature of the SMEs business in which most of them (ninety SMEs or 45%) deals in consumer goods. There are 35 SMEs in the service sector which translate into 17% while both clothing/tailoring and agric/farming/producer are respectively 11 percent. The number of businesses involved in telecoms and manufacturing are respectively twenty-three (12%) and seven (4%). This information of the nature of business is graphically illustrated on figure 8.



**Figure 8:** Nature of Business.

Source: Researchers' Analysis

In the same token, the variable on number eight analyses the status of the respondents in the business. From the responses so far generated, majority are Head/Chief Executive Officer of the SMEs (45%), followed by members of management (35%) and junior staffers who are 15 percent. Coming from the rear with 5 percent are the senior staffers. This information on organizational composition of the SMEs is best graphically illustrated in figure 9.

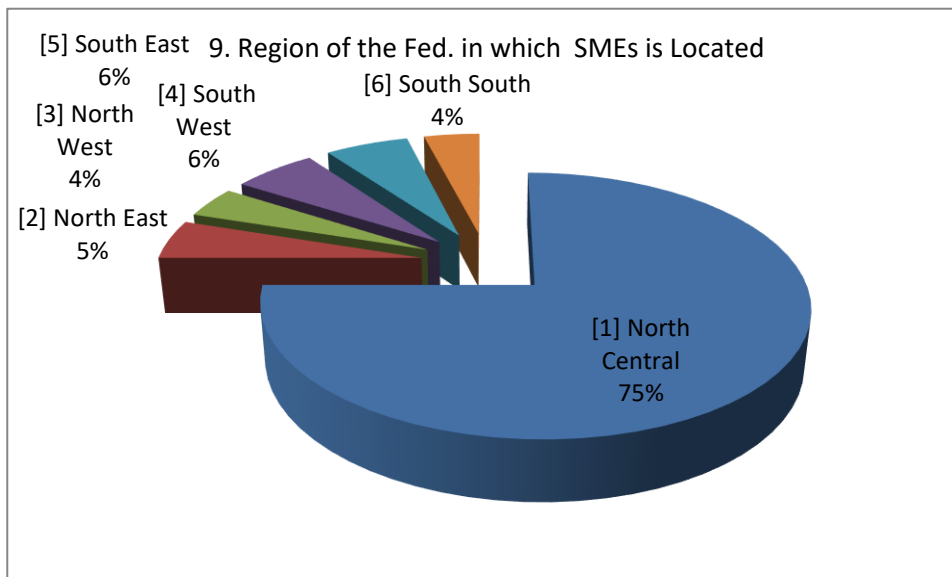


**Figure 9:** Status of Business.

Source: Researchers' Analysis

Similarly, the variable on number nine analyses the geographical regions of where the businesses operate. From the responses so far generated, majority of the SMEs came from North Central of Nigeria (75%), followed by South West and South East which unwittingly have the same number of responses each, 6 percent. On the other hand, North East and North West respectively have 5% and 4%. This information on region of the federation where the businesses operate is also illustrated in figure 10.

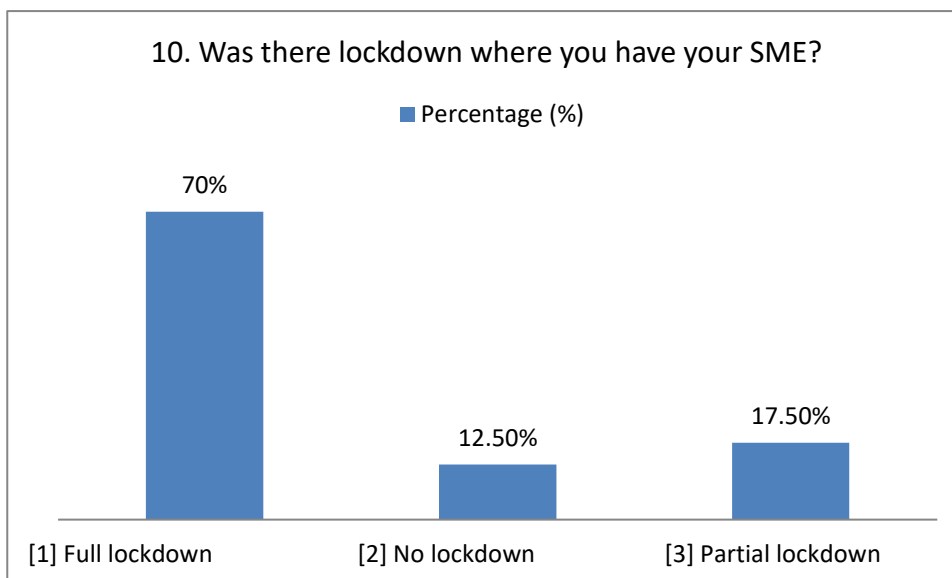




**Figure 10:** Region of the Federation SMEs is Located.

Source: Researchers' Analysis

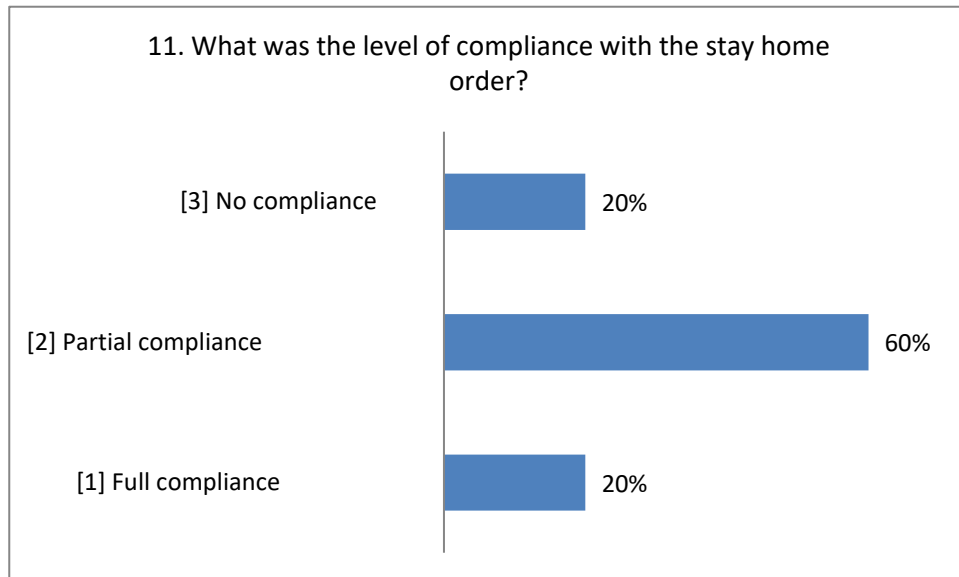
Table 3 in appendix 3 depicts the item-by-item percentage analysis of COVID-19 pandemic lockdown with questions on index, compliance level and coping strategies. The variable on number 10 seeks answer to the question if there is lockdown in the area where the retail business is located. As could be seen from the answers, majority agreed there is full lockdown (70%), followed by partial lockdown (18%) and no lockdown which is 12 percent. This information is represented in figure 11.



**Figure 11:** Was there lockdown Where SME is located?

Source: Researchers' Analysis

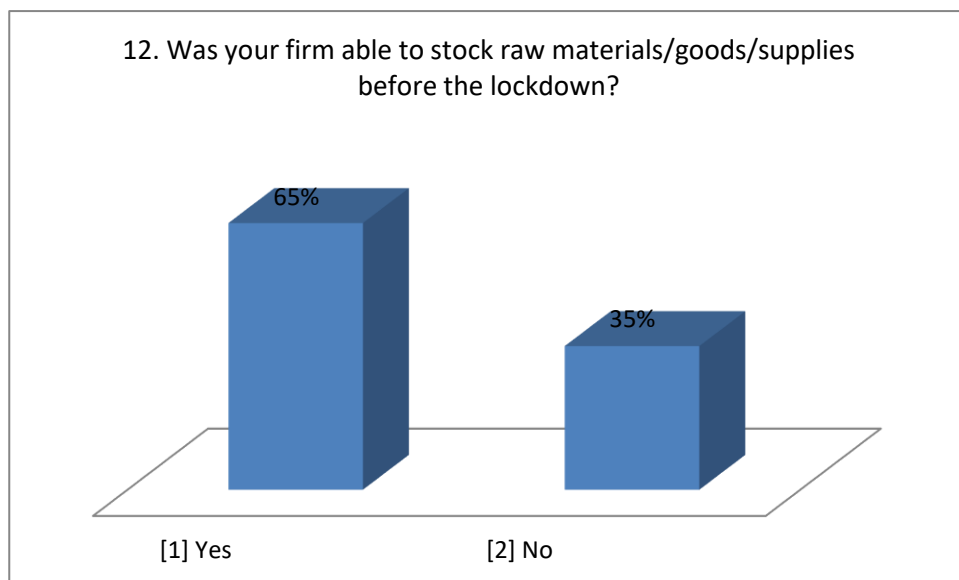
The question asked in number 11 of appendix 3 was the level of compliance with the stay-at-home order. The responses show that there was full compliance (20%), partial compliance (60%) and no compliance (20%). By inference, despite enforcement, full lockdown was not obvious. What is obvious is that people mostly observed partial lockdown. This information on lockdown compliance is graphically illustrated in figure 12.



**Figure 12:** Lockdown Level of Compliance

Source: Researchers' Analysis

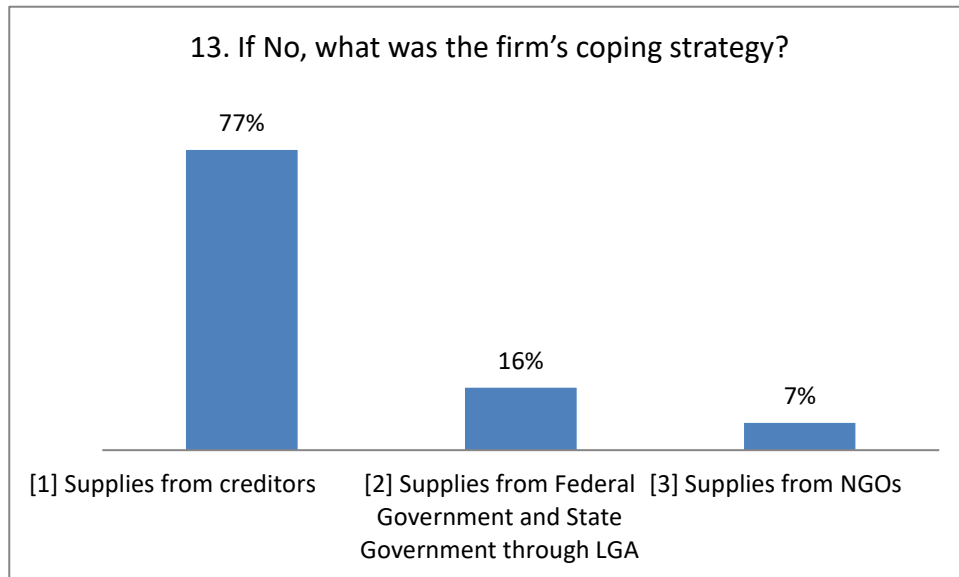
The focus of variable in number 12 in appendix 3 was to know if their enterprise was able to stock raw materials, goods or supplies before the lockdown commenced. While one hundred and thirty respondents (65%) answered in the affirmative, seventy or 35 percent said they were unable to stock raw materials, goods or supplies before the start of the COVID-19 pandemic lockdown. This information is graphically illustrated in figure 13.



**Figure 13:** Any stockpile before Lockdown?

Source: Researchers' Analysis

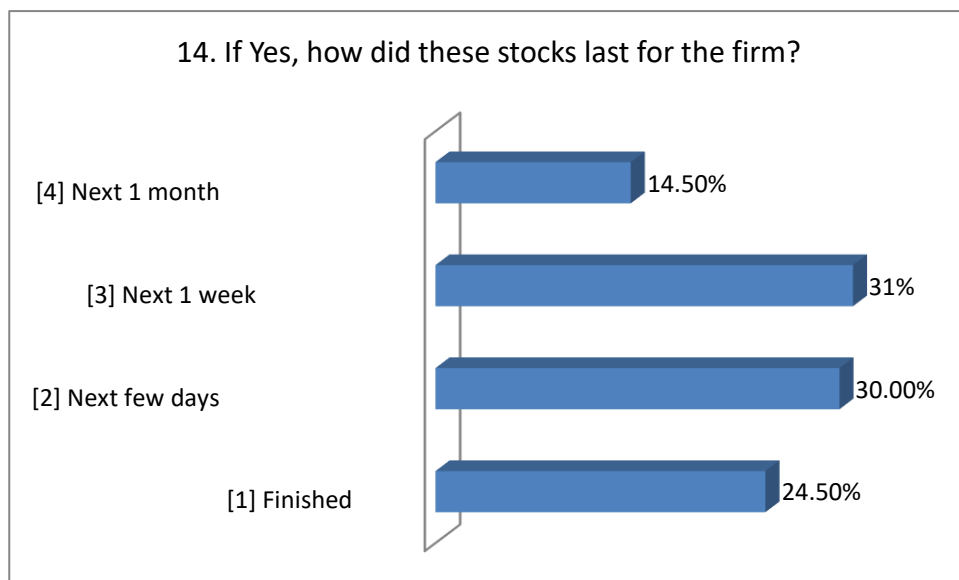
Still on table 3 in appendix 3, on item number 13 which asked respondents what have been their coping strategies during the lockdown. Fifty-four or 77 percent said they got supplies from creditors, while eleven SMEs (16%) said they got supplies from federal government and state government through LGA. However, five businesses representing 7 percent got supplies from non-governmental organizations (NGOs). The information on coping strategies for businesses that have not stockpiled supplies before the pandemic is in pie-chart in figure 14.



**Figure 14:** What was the coping strategy if no supplies stockpiled before lockdown.

Source: Researchers' Analysis

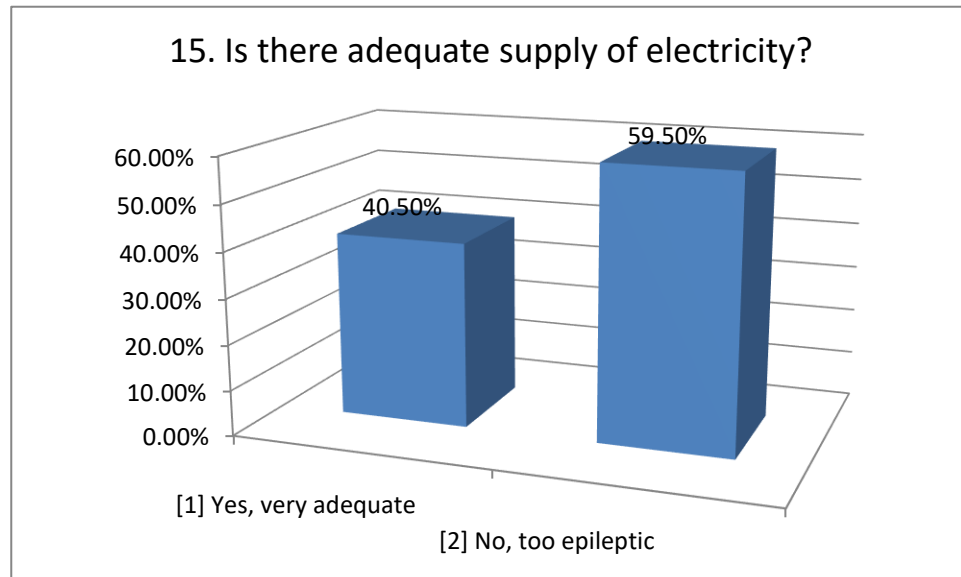
The number 14 question on table 3 asked respondents how long could the stock of supplies last for their businesses. The findings show those whose supplies have finished are forty-nine (24.5%), will last next few days are sixty (30%), will last next 1 week are sixty-two (31%) and will be enough for next one month are twenty-nine (14.5%). This information is depicted in the Bar-Chart in figure 15.



**Figure 15:** What was the coping strategy if no supplies stockpiled before lockdown.

Source: Researchers' Analysis

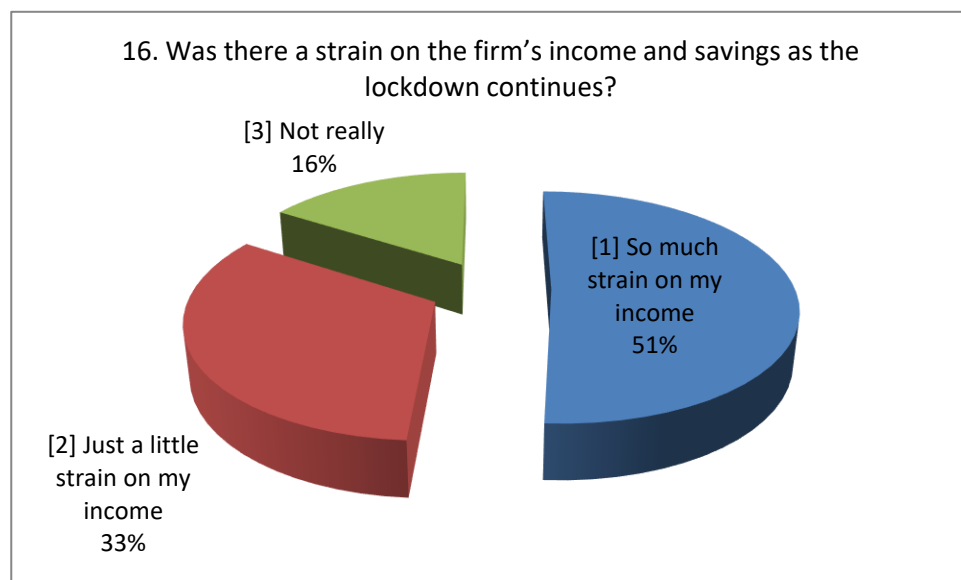
The last question on table 3 in appendix 3 is in number 15 which asked respondents if there was adequate supply of electricity for their businesses. Findings show one hundred and nineteen businesses or 59.5 percent have epileptic power supply while those with regular light were eighty-one SMEs representing 40.5% of the respondents. This information is also depicted in a special pie-chart in figure 16.



**Figure 16:** What was the coping strategy if no supplies stockpiled before lockdown.

Source: Researchers' Analysis

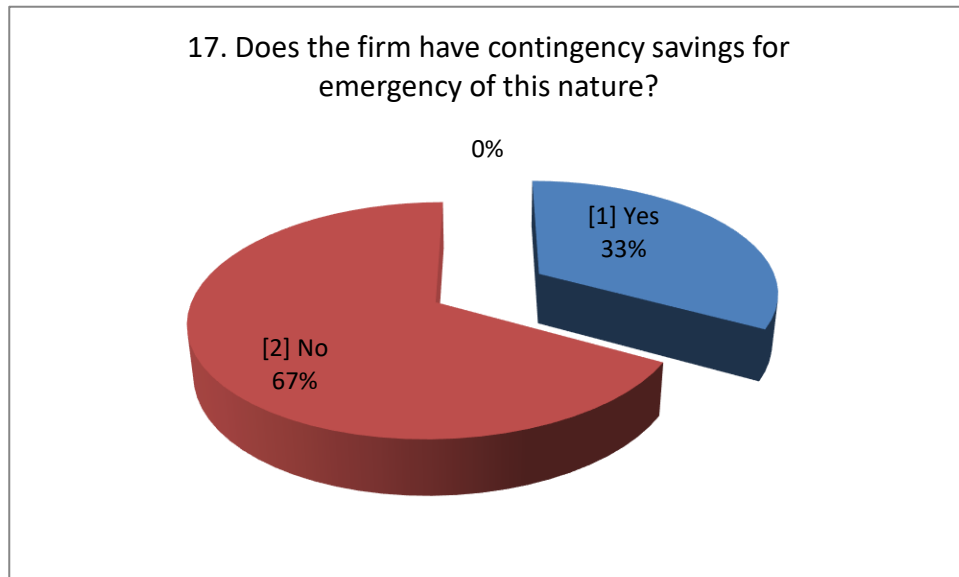
Table 4 presents the item-by-item percentage analysis of data on COVID-19 pandemic financial constraint. Question number 16 asked respondents if there was any strain on their business' income and savings as the lockdown continues. One hundred and two of the respondents which translated into 51 percent said there was so much strain on their income while sixty-six or 33 percent said just a little strain on their income. However, thirty-two or 16 percent of the respondents said "not really". This is captured graphically in figure 17.



**Figure 17:** Financial Strain on Income and Savings of Households,

Source: Researchers' Analysis.

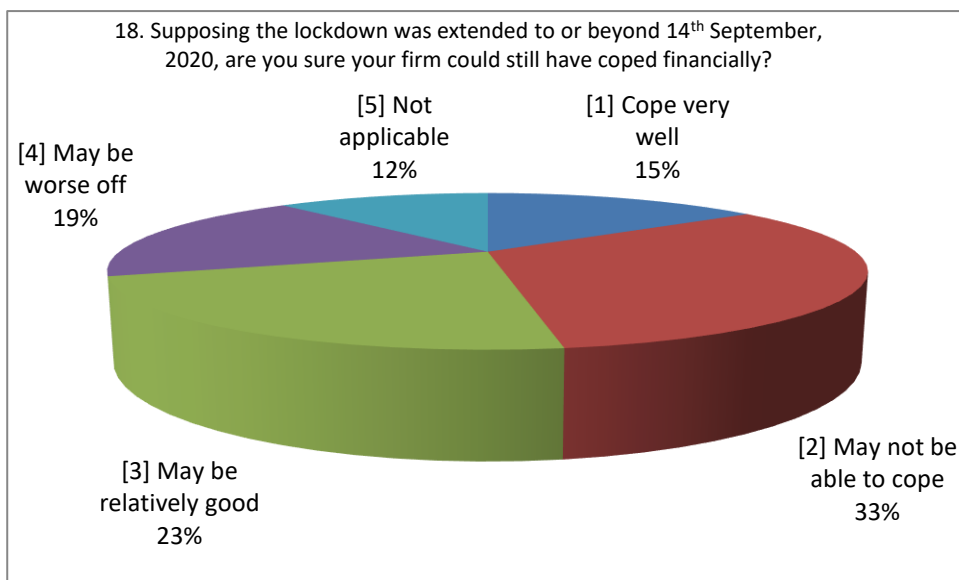
Item on number 17 of the same Table 4 asked respondents if their businesses have any contingency savings for emergency of this nature. While sixty-six (33%) answered in the affirmative, one hundred and thirty-four or 67 percent answered in the negative. This is depicted in the bar chart in figure 18.



**Figure 18:** Contingency Savings.

Source: Researchers' Analysis

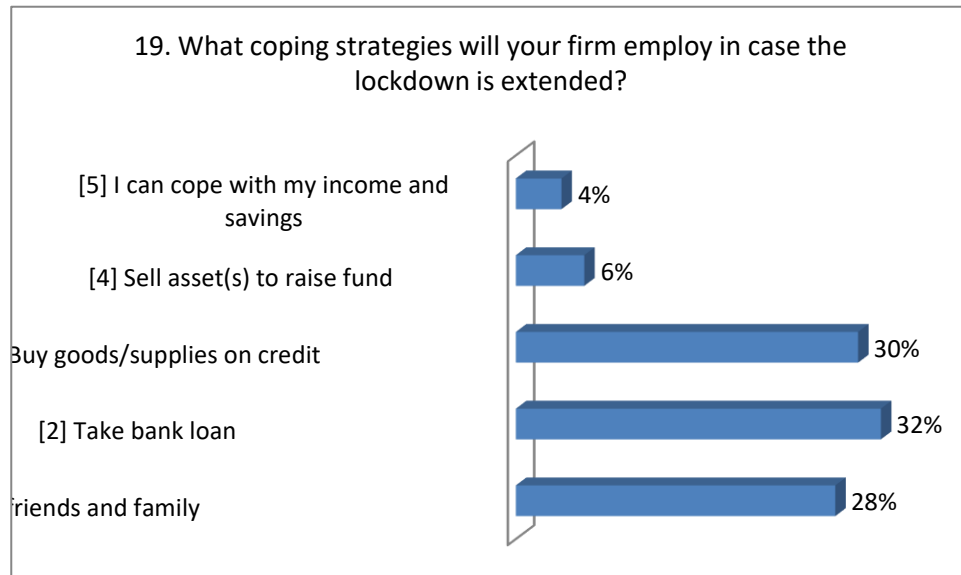
Similarly, item number 18 asked respondents that if the lockdown was extended beyond 14<sup>th</sup> April, 2020, if they are sure their businesses can still cope financially. While forty-five respondents representing 22 percent said they would cope well, sixty-five respondents or 32 percent stated otherwise. Others said they may be relatively good (20%), may be worse off (19%) and not applicable (12%). This is shown in figure 19.



**Figure 19:** Lockdown extension and coping financially.

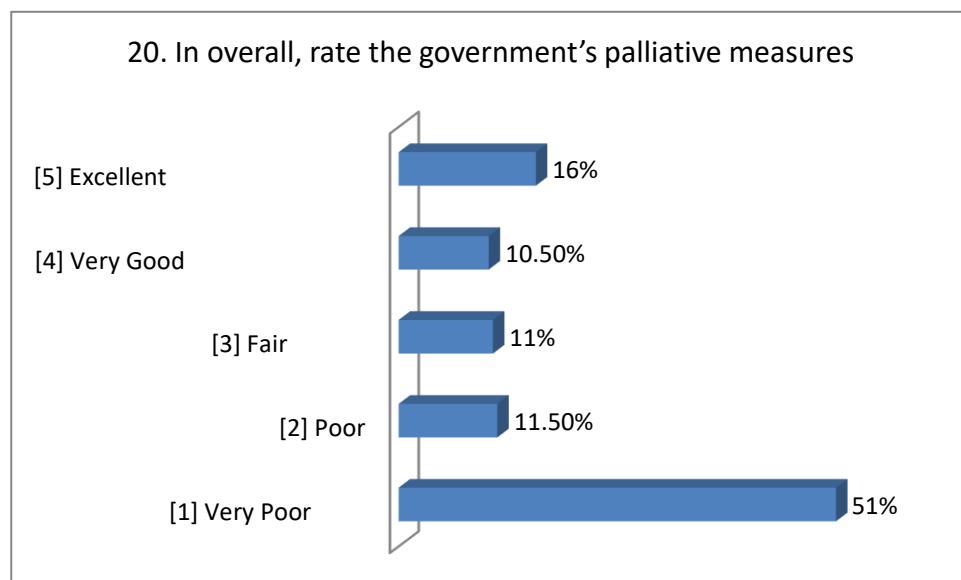
Source: Researchers' Analysis

The question in number 19 of the same table 4 asked respondents what coping strategies they would employ in case the lockdown was extended. While sixty-four or 32 percent said they would take bank loans, sixty or 30 percent said they would buy goods and supplies on credit from creditors. Fifty-six respondents or 28% said they would borrow from friends and family in order to continue in their retailing business while twelve (6%) said they would sell their assets to raise fund for their business operations. However, the remaining people said they could cope with their income and savings (4%). This is shown in the bar chart in figure 20.



**Figure 20:** Lockdown extension and coping financially,  
Source: Researchers' Analysis

The last Table for this analysis is table 5 in appendix 5 which is the overall rating of government's palliative measures on the COVID-19 pandemic. As can be seen from the table, and the Bar chart in Figure 21, one hundred and two respondents or 51 percent rate government palliative measures very poor while twenty-three respondents or 11.5 percent rated it poor. Others were fair (11%), very good (10.5%) and excellent which recorded 16 percent rating. By inference, lack of palliative lends support to the findings on non-compliance with full lockdown.



**Figure 21:** Overall Rating of Government's Palliative Measures, Source: Researchers' Analysis

## 5. CONCLUSION AND POLICY RECOMMENDATIONS

One of the most common concerns concerning the Covid-19 pandemic is its impact on the economy, especially the retailing business. The results of this study reflect the impact of the pandemic on small retailing businesses mainly in Plateau State and Kogi States as well as few businesses in Bauchi State, Kaduna State, Lagos State, Abia State and Rivers State of Nigeria. The sample was skewed in distribution in favour of North Central geographical region of Nigeria, known for its high-level retailing business profile. The businesses also cut across a wide range of industries, thus helping to see the general picture of the impact of the pandemic. The ownership status of the retailing business showed the preference for sole proprietorship amongst small businesses. Strain on income and saving as a result of the pandemic was the most agreed upon a statement by the SMEs, thus reflecting a generally negative

impact of COVID19 on sales and revenue generation. Results also show that many businesses obtained goods and supplies from creditors on credit during the lockdown, with consumer goods as the most dominant retailing business. However, the results reflect a general resilience amongst the SMEs as implied from their decision to borrow from friends and families, taking goods and supplies from creditors and bank loans in order to continue in their line of business and not closing their business as a result of the pandemic. The respondents generally disagreed with the government's palliatives measures in which they rated it very poor. By inference, lack of government's palliative lends support to the findings on non-compliance with full lockdown. Majority of the respondents observed partial compliance to the lockdown. By inference, despite enforcement, full lockdown was not obvious. What is obvious is that people mostly observed partial lockdown. In addition, irregular supply of electricity was the one of most agreed upon a statement by the SMEs, thus reflecting a generally negative impact of COVID19 on production activities as business had to resort to alternative power supply through generators. Government should, therefore, provide adequate electricity, low-interest loans, relaxation of the loan repayment, and relaxation of taxation payment to alleviate the impact of the pandemic on the businesses.

## APPENDICES

### Appendix I

**Frequency Table 1:** Socio-demographic Characteristics of the Respondents

Variable	Frequency (N=200)	Percentage (%)	Cumulative
1. Age			
[1] 26-35	51	25.5	0
[2] 36-45	86	43	137
[3] 46	36	18	173
[4] Above 46	27	13.5	200
2. Gender			
[1] Male	106	53	0
[2] Female	94	47	200
3. Marital Status			
[1] Married	30	15	0
[2] Single	150	75	180
[3] Divorced/Separated	20	10	200
4. Educational Qualification			
[1] None	5	2.5	0
[2] Primary Sch. Cert.	38	19	43
[3] Secondary Sch. Cert.	82	41	125
[4] Post-Secondary Sch. Cert.	59	29.5	184
[5] Post graduate	16	8	200
5. Occupation			
[1] Public/Civil Servant	5 120 16 40 19	2.5	0
[2] Trader		60	125
[3] Manufacturer		8	141
[4] Service Sector Player		20	181
[5] Farmer		9.5	200

Source: Researchers' Analysis

### Appendix II

**Table 2:** Information of the SMEs

Variable	Frequency(N=200)	Percentage (%)	Cumulative
6. Type of Enterprise			
[1] Sole proprietorship	92	46	0
[2] Partnership	66	33	158
[3] Limited liability	30	15	188
[4] Unlimited liability	12	6	200
7. Nature of Business			
[1] Agric/Farming/Produce Buyer	23	11.5	0
[2] Sale of Consumer Goods	90	45	113
[3] Manufacturing	7	3.5	120

[4] Service	35	17.5	155
[5] Clothing/Tailoring	22	11	177
[6] Telecoms	23	11.5	200
8.Status in the SME			
[1] Head/CEO	90	45	0
[2] Management	70	35	160
[3] Senior staff	30	15	190
[4] Junior staff	10	5	200
9. Region of the Federation in which you or SMEs is Located			
[1] North Central	150	75	0
[2] North East	10	5	160
[3] North West	8	4	168
[4] South West	12	6	180
[5] South East	12	6	192
[6] South	8	4	200

Source: Researchers' Analysis

### Appendix III

**Table 3:** COVID-19 Pandemic Lockdown

Variable	Frequency (N=200)	Percentage (%)	Cumulative
10. Was there lockdown where you have your SME?			
[1] Full lockdown	140	70	0
[2] No lockdown	25	12.5	165
[3] Partial lockdown	35	17.5	200
11. What was the level of compliance with the stay home order?			
[1] Full compliance	40	20	0
[2] Partial compliance	120	60	160
[3] No compliance	40	20	200
12. Was your firm able to stock raw materials/goods/supplies before the lockdown?			
[1] Yes	130	65	0
[2] No	70	35	200
13. If No, what was the firm's coping strategy?			
[1] Supplies from creditors	54	77	0
[2] Supplies from Federal Government and State Government through LGA	11	16	65
[3] Supplies from NGOs	5	7	70
14. If Yes, how did these stocks last for the firm?			
[1] Finished	49	24.5	0
[2] Next few days	60	30	109
[3] Next 1 week	62	31	171
[4] Next 1 month	29	14.5	200
15. Is there adequate supply of electricity?			
[1] Yes, very adequate	81	40.5	0
[2] No, too epileptic	119	59.5	200

Source: Researchers' Analysis

**Table 4:** COVID-19 Pandemic Financial Constraint

Variable	Frequency(N=200)	Percentage (%)	Cumulative
16. Was there a strain on the firm's income and savings as the lockdown continues?			
[1] So much strain on my income	102	51	0
[2] Just a little strain on my income	66	33	168
	32	16	200



[3] Not really			
17. Does the firm have contingency savings for emergency of this nature?			
[1] Yes	66	33	0
[2] No	134	67	200
18. Supposing the lockdown was extended to or beyond 14 <sup>th</sup> September, 2020, are you sure your firm could still have coped financially?			
[1] Cope very well	30	15	0
[2] May not be able to cope	65	32.5	95
[3] May be relatively good	45	22.5	140
[4] May be worse off	37	18.5	177
[5] Not applicable	23	11.5	200
19. What coping strategies will your firm employ in case the lockdown is extended?			
[1] Borrow from friends and family	56	28	0
[2] Take bank loan	64	32	120
[3] Buy goods/supplies on credit	60	30	180
[4] Sell asset(s) to raise fund	12	6	192
[5] I can cope with my income and savings	8	4	200

Source: Researchers' Analysis

## Appendix 5

**Table 5:** Overall Rating of Government's Palliative Measures

Variables	Frequency (N=144)	Percentage (%)	Cumulative
<b>20. In overall, rate the government's palliative measures on the scale of 1-5 rate (5 is the highest)</b>			
[1] Very Poor	102	51	0
[2] Poor	23	11.5	125
[3] Fair	22	11	147
[4] Very Good	21	10.5	168
[5] Excellent	32	16	200

Source: Researchers' Analysis

## Funding

This research did not receive any funding.

## Conflict of Interest

The authors declare no conflicts of interests any matter related to this paper.

## Data and materials availability

All related data have been presented in this paper.

## Peer-review

External peer-review was done through double-blind method.

## REFERENCES AND NOTES

1. Baldwin, R, Tomiura, E. (2020). Economics in the time of COVID-19. In: Baldwin R, di Mauro BW, editors. Thinking ahead about the trade impact of COVID-19. CEPR Press, 59-71.

2. Aladejebi, O. (2020). Managing small businesses in Nigeria during Covid-19 crisis: Impact and survival strategies. *IOSR Journal of Business and Management (IOSR-JBM)*, 22 (8), 24-34.
3. Bartik, W.A., Bertrand, M., Cullen, B. Z., Glaeser, L.E., & Luca, M. (2020). How are small businesses adjusting to COVID-19? Early Evidence from a survey (No. w26989). *National Bureau of Economic Research*. <https://doi.org/10.3386/w26989>.
4. Bartik, A., Bertrand, M., Cullen, Z.O., Glaeser, E. L. Luca, M. and Stanton, C. (2020). The impact of COVID-19 on small business outcomes and expectations. Working Paper 20-102. Retrieved from [www.ssrn.com](http://www.ssrn.com)
5. CDC (2020). COVID-19 background. Retrieved April 23, 2020, from, <https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/summary.html#emergence>; 2020.
6. CDC (2013). Severe acute respiratory syndrome (SARS). Retrieved April 23, 2020, from, <https://www.cdc.gov/sars/about/index.html>; 2013.
7. CDC (2015). Information about Middle East respiratory syndrome (MERS). Retrieved April 23, 2020, from, <https://www.cdc.gov/coronavirus/mers/about/index.html>; 2015.
8. Chopra, S., & Sodhi, S.M. (2004). Managing risk to avoid supply-chain breakdown. *MIT Sloan Management Review*, 46(1), 53-61.
9. Cumbie, B. (2017). The essential components of disaster recovery methods: A Delphi study among small businesses. In *Proceedings of the Americas Conference on Information Systems (AMCIS)*, 17. 1-16. doi: 10.1.1.1024.6656
10. Czech, B. (2013). *Supply shock: Economic growth at the crossroads and the steady state solution*. Gabriola Island: Canada.
11. Fleisch, E., & Tellkamp, C. (2005). Inventory inaccuracy and supply chain performance: A simulation study of a retail supply chain. *International Journal of Production Economic*, 95(3), 73-85.
12. Hall, R., & Lieberman, M. (2012). *Economics: Principles and Applications*. Cengage Learning, p. 849, ISBN 1-111-82234-4.
13. Hui, S.D., & Azhar, I.E., Madani, A.T., Ntoumi, F., Kock, R., Dar, O., et al. (2020). The continuing 2019-nCoV epidemic threat of novel coronaviruses to global health and the latest 2019 novel coronavirus outbreak in Wuhan, China. *International Journal of Infectious Diseases*, 91, 264.
14. ILO (2020). COVID-19 and the world of work: Impact and policy responses. *International Labour Organization Note*. Retrieved from [www.ilo.org](http://www.ilo.org).
15. IMF (2020). Policy-responses-to-COVID-19. *International Monetary Fund*. Retrieved from [www.imf.org](http://www.imf.org)
16. Ivanov, D., Dolgui, A. (2020). Viability of intertwined supply networks: Extending the supply chain resilience angles towards survivability. A position paper motivated by COVID-19 outbreak. *International Journal of Production Research*, 58 (Forthcoming), 1-12.
17. Ivanov, D. (2020). Predicting the impacts of epidemic outbreaks on global supply chains: A simulation-based analysis on the coronavirus outbreak (COVID-19/ SARS-CoV-2) case. *Transport Res E Logist Transport Rev.*, 136(March), 101922
18. Jorda, O., Singh, S. R., & Taylor, A. M. (2020). Longer-run economic consequences of pandemics. *National Bureau of Economic Research*. Retrieved from [www.frbsf.org](http://www.frbsf.org)
19. KPMG (2020). Coronavirus: Global and domestic impact. *KPMG International*. Retrieved from [www.KPMG/ng](http://www.KPMG/ng)
20. Kumar, S., & Chandra, C. (2010). Supply chain disruption by avian flu pandemic for U.S. companies: A case study. *Transport Journal*, 49(4), 61-73.
21. Linton, T., & Vakil, B. (2020). Coronavirus is proving we need more resilient supply chains. Retrieved April 23, 2020, from, <https://hbr.org/2020/03/coronavirus-isproving-that-we-need-more-resilient-supply-chains>.
22. NCDC (2020). COVID-19 Nigeria. *Nigeria Centre for Disease Control*. Retrieved from [covid19.ncdc.gov.ng](http://covid19.ncdc.gov.ng)
23. Nicks, B. A., & Do, O. W. (2020). *Coronavirus disease 2019 (COVID-19): A global crisis*. Medscape Web site. <https://reference.medscape.com/slideshow/2019-novel-coronavirus-6012559>
24. Oke, A., & Gopalakrishnan, M. (2009). Managing disruptions in supply chains: A case study of a retail supply chain. *Int J Prod Econ.*, 118 (1)68-74.
25. Ozili, P. (2020). Covid-19 pandemic and economic crisis: The Nigerian experience and structural causes. *SSRN Electronic Journal*, 1-19. doi:10.2139/ssrn.3567419
26. Phillipson, J., Gorton, M., Turner, R., Shucksmith, H. M., Aitken-McDermott, K., Area, F., Cowie, P., Hubbard, C., Maioli, S., McAreavey, R., Souza-Monteiro, D., Newbery, R., Panzone, L., Rowe, F., & Shortall, S. (2020). The COVID-19 pandemic and its implications for rural economies. *Sustainability*, 12 (3973), 2-9. doi:10.3390/su12103973
27. Salehi, S. N., (2015). Torabi, S.A., & Sahebjamnia, N. (2015). Retail supply chain network design under operational and disruption risks. *Transport Res E Logist Transport Rev.* (75), 95-114.
28. Thunström, L., Newbold, S. C., Finnoff, D., Ashworth, M., & Shogren, J. F. (2020). The benefits and costs of using social distancing to flatten the curve for COVID-19. *Journal of Benefit-Cost Analysis*, 11(2), 179-195. <https://doi.org/10.1017/bca.2020.12>.
29. Wilson, M.C. (2007). The impact of transportation disruptions on supply chain performance. *Transport Res E Logist Transport Rev.*, 43 (4), 295-320.